

US EPA ARCHIVE DOCUMENT

U.S. Department *of* Commerce

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National Oceanic *and* Atmospheric Administration  
National Ocean Service

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OFFICE *of* RESPONSE *and* RESTORATION

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# Observations and Documentation Case Study

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# Visual Observation Photo Documentation

Basic

Inexpensive

Simple Equipment needs

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# Follow-Up Study on Oiled Vegetation Cutting Along the Delaware River

Edwin Levin  
Jay Pickney  
Todd Montello

## The Spill

- Vessel -----> T/V Canadian Liberty
- Location-----> Fort Mifflin, PA (Sun Refinery)
- Product-----> Heavy Venezuelan Crude Oil
- Quantity -----> ~50 barrels (~2,100 gallons)
- Cause -----> Overfilled tanks
- Impacts -----> 12 kilometers (8 miles) NJ shoreline

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- Year long study
- Monitored the recovery

## Establish Monitoring Sites

- Unoiled
- Oiled cut
- Oiled uncut



## Establish Survey Period

- Minimum time to show change
- Water height
- Growing season

## Determine Transects

- Start and end points
- Length
- Repeatable

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## Topographic Profile

- Changes thru erosion
- Document water level

## Oil Measurements

- Correlate oil levels to impacts
- Standard and consistent descriptions



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## Document Response

- Where
- How
- Results



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## Vegetation

- Type
- Condition
- Density

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## 1997 Vermillion Parish Burn



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## Sediment

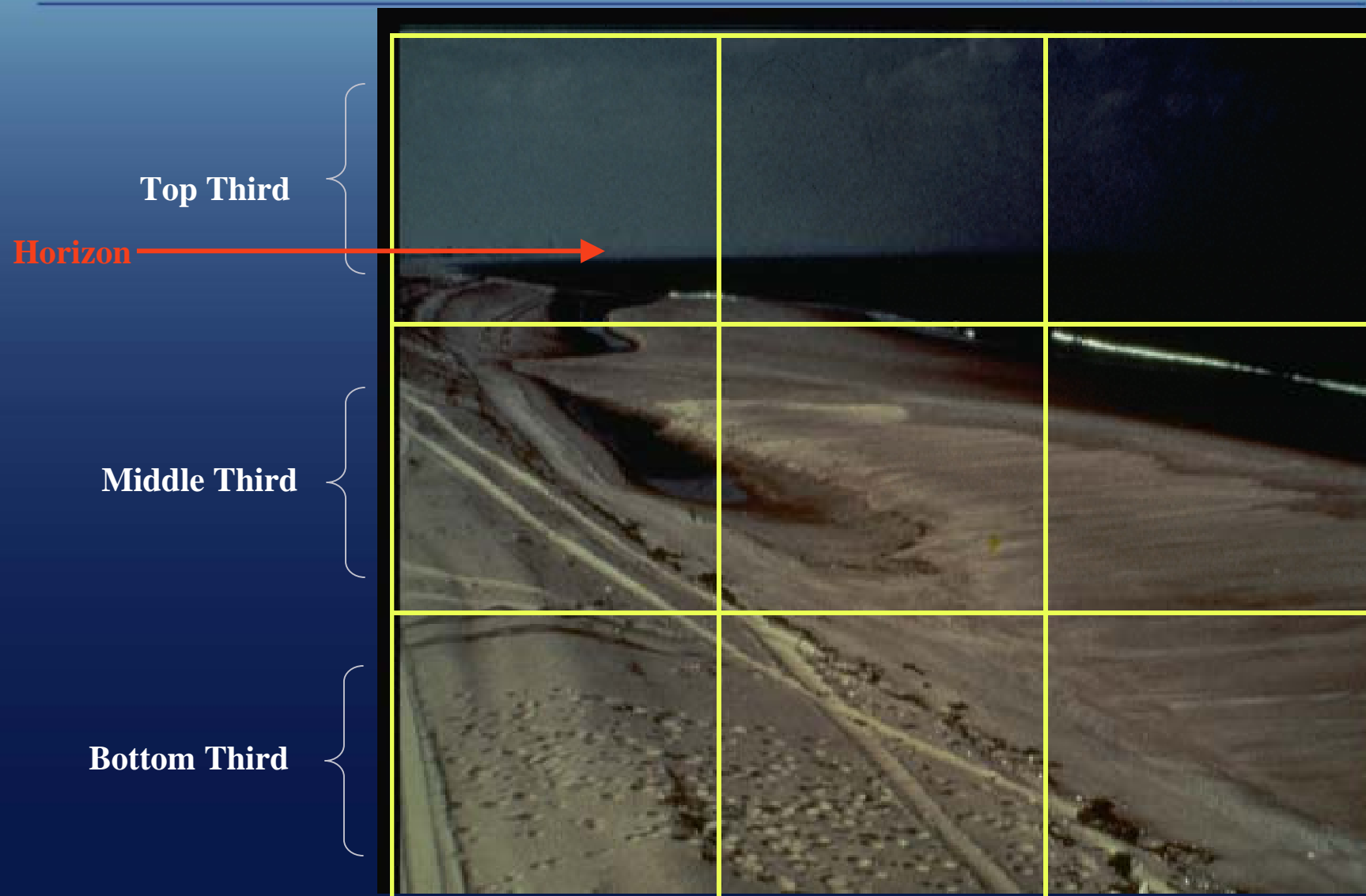
- Type
- Grain size

## Photographic Documentation

- Repeatable
- Correct Technique

# Composition

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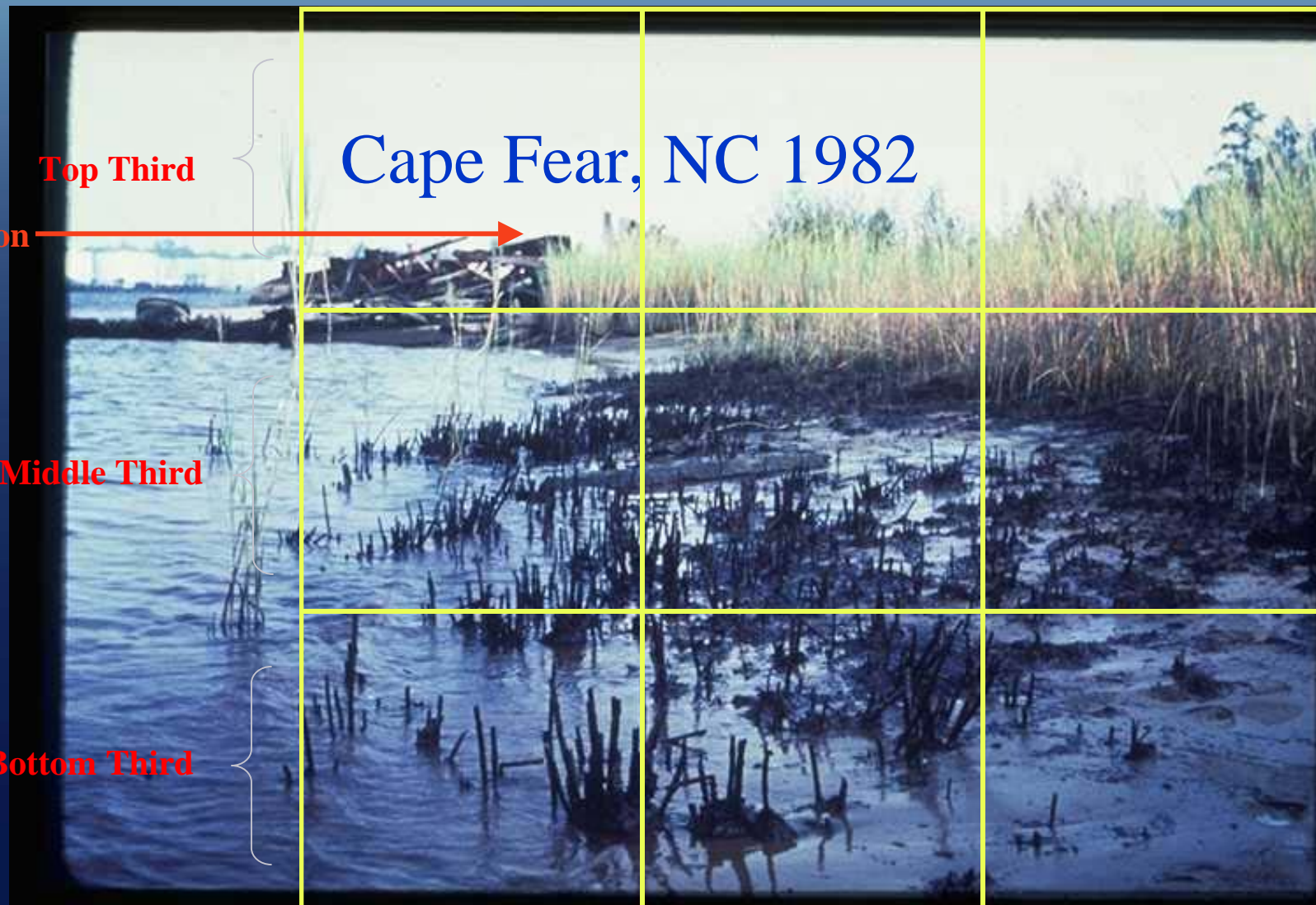
# Cape Fear, NC 1982

Top Third

Horizon

Middle Third

Bottom Third



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## Cape Fear, NC 1982



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## Cape Fear, NC 1984



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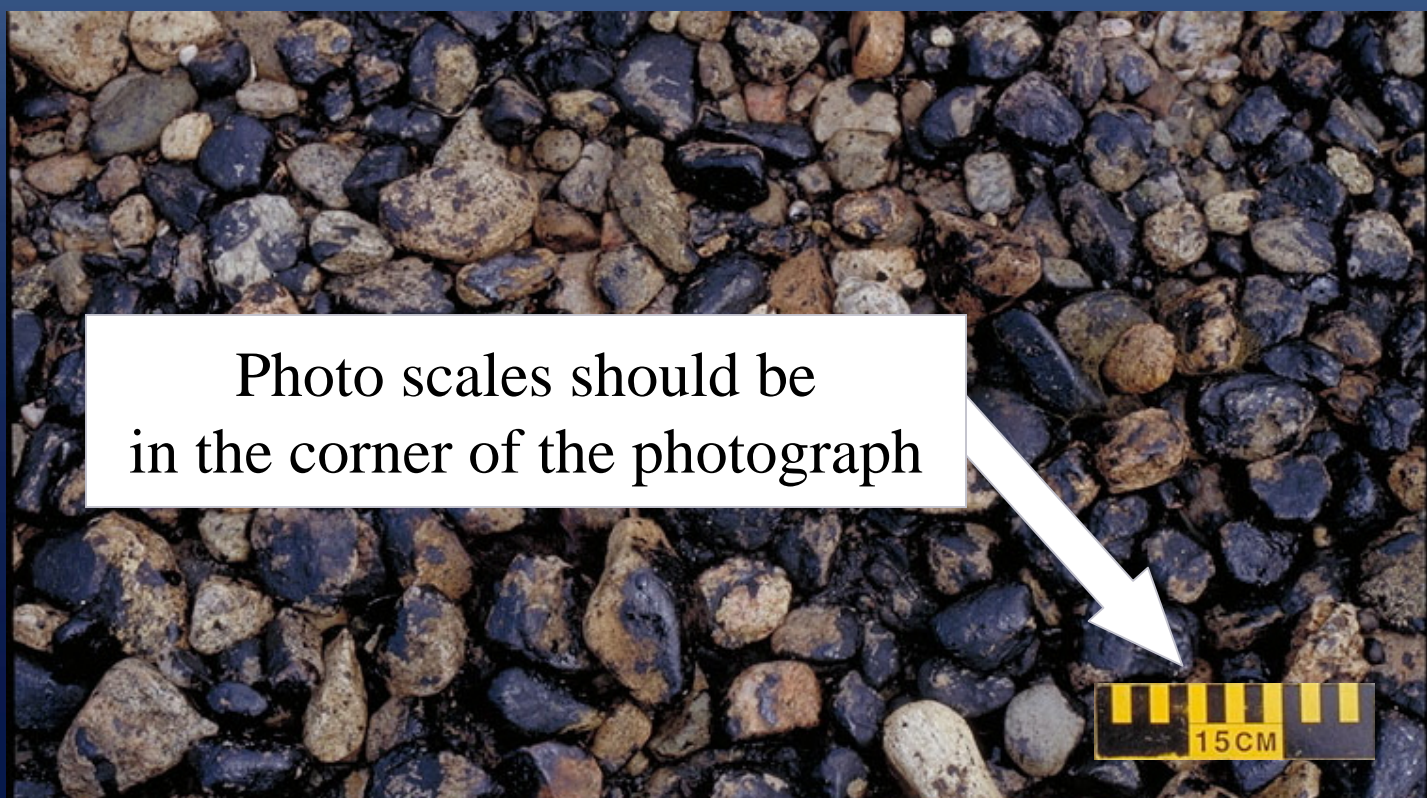


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## Where to put the Photo Scale



## Where to put the Photo Scale





## Photo Scale Exceptions...

- Larger scale photographs
- Measurement of specific feature



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## Misleading Photographs

Label your photographs clearly





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# Field Bag Equipment



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## QUESTIONS



NOAA website: <http://response.restoration.noaa.gov>